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# **An Evaluation of Housing Conditions and Livability in Lagos, Nigeria: A Study of Festac Town Housing Estate (Phase 1)**

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## **ABSTRACT**

*Festac Town Housing Estate (Phase 1) was conceived and executed in the 70's as a masterpiece in terms of providing mass housing, livable environment and complementary infrastructure facilities. This qualitative study uses purposive and stratified sampling. Research instruments of interview, and a questionnaire schedule was administered to a sample population of 210 Festac residents to investigate the condition of houses, condition and adequacy of estate physical infrastructure facilities, the residents' level of utility satisfaction with the social infrastructure, and affordability. The study, using descriptive analysis, and Chi-square Goodness of Fit test, shows that the condition of buildings and internal building amenities are generally good, except their water taps and laundry. Estate physical infrastructure facilities are in deplorable condition. The residents are satisfied with security, health centres and clinics, schools, police and fire services, post office, markets, places of worship, open spaces and playgrounds, banking services, shopping centres, petrol filling stations, workshops, waste and sewage collection/disposal. However, they are dissatisfied with hospital, library and entertainment facilities. Rents for vacant accommodation, land use charge rates, and public transportation are generally affordable, except water rate. The rental and capital values in the Estate are comparatively higher than those of similar neighbouring estates, such as Mile 2 Jakande and Satellite Town. The work concludes*



*that the Estate is significantly able to meet the needs and aspirations of its residents.*

**Keywords:** *Livability, Festac Town, Housing Conditions, Estate Infrastructure, Social Services*

## **INTRODUCTION**

Lagos Metropolitan Area witnessed an unprecedented high rate of infrastructure and facilities provision when trade and commerce flourished with the introduction of export cash products in the late 1940s. The economic system of the country was modernized with the construction of road and railway networks, Apapa sea and Ikeja airports, which enhanced the accessibility of Lagos from other parts of the country. Lagos remained the major town for receiving and discharging both imported and exported goods. During this period, there was concentration of infrastructure and social amenities in Lagos. But the most worrisome situation was the selective planning system introduced by the colonial administration. Instead of a comprehensive planning of Lagos metropolitan area, it was only the colonial places of abode and work such as Government Residential Areas (GRA) at Apapa, Ikoyi, Ilupeju and Ikeja that were properly plan. The plights of the indigenous urban residents were left unresolved.

Long-term uncoordinated urban based developments of colonial government were inherited by the indigenous governments immediately after independence. Lagos, during this period, especially between 1962 and 1968 witnessed an unprecedented high rural-urban migration of people from the rural and less privileged regions (Onibokun, 1973). Similarly, the oil boom era of 1970s favoured urban concentration of industrial and social facilities in the South West Area, Lagos, then became one of the twenty emerging industrial centres, and that also made it a beneficiary of Nigeria's post-civil war rehabilitation programmes.

Rapid urbanization, poverty, corruption, and bad governance that pervaded the Nigerian space impacted on environmental quality, quantitative and qualitative residential housing. The housing shortage in Lagos is estimated at 65000 units per annum, while the overall housing shortage in Nigeria is estimated at 17 million units. The resultant acute shortage of livable housing accomodation necessitated the development of Festac Town in 1977.

## **STUDY AIM AND OBJECTIVES**

The aim of the study is to elicit the livability of Phase 1, Festac Town Housing Estate using the condition of buildings, internal building amenities, estate psycho-social infrastructure, and residents' affordability as measuring parameters. The objectives are as follows:

1. To determine whether the physical conditions of housing and conditions of building amenities provide utility satisfaction to the residents of Festac Town.
2. To determine whether physical estate infrastructure facilities are in satisfactory conditions.
3. To determine the adequacy of physical estate infrastructure facilities in the estate.
4. To determine level of the residents' satisfaction with the social infrastructure facilities in the estate.
5. To investigate the affordability of house rental and other selected bills payable by the residents.

The significance of this research is to provide empirical information on housing conditions and infrastructure facilities in Festac Town to Federal, State, and Local Government policy makers with a view to improving the quality of life of the residents.



## **Research Questions**

1. Are houses and internal building facilities in the Estate in satisfactory physical condition?
2. Are the physical estate infrastructure facilities in satisfactory functional conditions?
3. Are the provisions of physical estate infrastructure facilities adequate in the estate?
4. Are the estate residents satisfied with the Social Infrastructure facilities provided in the estate?
5. Are house rents, water and public transportation affordable to the estate residents?
6. Is the estate in a livable condition?

## **Operational Definition of Terms**

*Infrastructure* – The aggregate of all facilities that allow a society to function effectively. Such facilities include electricity, water supply, drainage, waste disposal, roads, sewage, street lighting, and telecommunications.

*Livability* – Livability considers the suitability of a residential estate as a place of abode and its ability to meet the needs and aspirations of Festac Town residents in terms of comfortability and satisfaction derivable from environmental quality, security, health care, schools, markets, banks, shopping, recreation, places of worship, noise level, and fire and petrol service stations.

*Festac Town Residents* – Owner-occupiers and bonafide tenants of houses in Festac Town Housing Estate, Phase 1

*Affordability* – Ability to meet rent, water, land use charge rates, and public transportation liabilities.

## **CONCEPTUAL OVERVIEW AND THEORETICAL FRAMEWORK**

Housing, in more general and social term, is the process of providing houses for people to live in. Fadahunsi (1985) argues that for housing to be effective it has to be seen in its social setting: That is, housing must be considered beyond ordinary building, but, it must be a building in which the occupier would like to live with happiness. Many factors affect the desire to live in a house: These include the community, the physical setting, the facilities that make the ingress into and out flow from the community easy or difficult, affordability, the availability of essential facilities for use in the house, such as water, and electricity (Onibokun, 1985). Similarly, availability of these facilities, as noted by Hardoy and Setterthwaite (1986) determines the quality of housing area and the survival of its inhabitants. Misra (1986) regarded these facilities as basic infrastructure required for quality urban life. As a precondition for a house to be more attractive and conducive for the occupier, the total physical environment must be considered. The reason is that a planned environment would provide easy communication and transportation, schools, parks, and play grounds shopping centres, open spaces, water and electricity. Similarly, a livable housing area must be adequately drained, while waste disposal systems must be functioning effectively, so as to ensure the cleanliness of the surrounding environment (Fadahunsi, 1985). In characterizing housing delivery, one should consider the needs to eliminate overcrowding, which are the worst pollutant of the environment and a major cause of slums. Clinard (1973) characterizes slum areas as overcrowding, congested housing, area with deficient physical amenities. Therefore, absence of social amenities coupled with inadequate housing unit provision to meet the need of the yearning population may be regarded as the root of slum and urban blight (Barrett and Beardmore 2000).

The social context of housing, presupposes a living environment that contains different types of residential buildings which must be free from social problems such as robbery, assault, diseases, assassination, alcoholism, prostitution, juvenile delinquency, and gambling. According to Weitz, (1973) a physically conducive housing area must be appealing in outlook but he noted that all the bad qualities of human life are the products of slum and blighted housing area, and that slum consists of dwellings of extremely flimsy construction, lacking the basic urban services such as safe



water supply. Onibokun and Kumuyi (1996) characterize slum housing area as an area without open space and other essential amenities. Barrett and Beardmore (2000) agreed that urban poor situation of Indian cities, a typical example of the third world city as an area where majority of inhabitants are suffering from abject poverty. Obudho and Aduwo (1989) further identified slum and squatter settlements as the hub of crime, while congestion is identified as one of the major reasons for criminal behaviour (Obudho and Owuor 1994). Similarly, Adisa (1994) argued that the areas that are very prone to crime in the Lagos Metropolitan area are slum and transition settlements such as Ajegule, Ebute-Metta, Iponri, Ketu, Mushin and Oshodi. Petty thefts and criminal behaviour are common crimes in the slums, resulting from communality, lack of control over children and sharing of social services. This situation has become a tradition that can be handed from generation to generation in most of urban rental housing areas. The worsening situation has made some urban residents in the city of Lagos to seek accommodation in the new housing areas on the outskirts. However, unabated social problems and misdemeanours spread from one urban geographical area to another.

Housing needs go beyond quantitative housing units. One needs to look at the quality of existing housing facilities and the prospects of increasing the existing housing stock. Hence, the effort to meet with housing units required must not jeopardize the relevance of housing quality (Fagbohun, 2008). It is suggested that neighbourhood conditions, structure, internal adequacies of dwelling units, the number of people in the household and their peculiar requirements and traditions, combine to constitute different needs for individual families and householders (Needleman, 1985). In this wise, housing is shelter, and for the shelter to meet the criteria of habitability and liveability, it must meet a specified minimum standards (Onibokun, 1985). Agbola (1994) argued that it is only through development control which comprises land use zoning and planning standard that the ultimate aim of physical planning could be achieved. The aim is to achieve a healthy, conducive, satisfying and aesthetically pleasing environment in which to pursue different kinds of human activities.

Living in a livable housing area has something to do with affordability, safe, reliable and economic transportation choices (NARC 2012). Jakande (2003) observed that in Nigerian urban areas, there is an acute scarcity

of livable residential houses. The reason in that most Nigerians in Urban areas live in rented houses. Individual owners, build a larger percentage of these houses incrementally over many years, and since most of these landlords built their houses for economic purposes, the rents they charge are often very high, and are usually payable two years or more in advance, whereas, the quality of these houses is poor and of the substandard classes. Most unfortunately, much could not be done by the government to arrest the situation, as its contributions are a small fraction of the totality of the existing housing stock. Urban poor therefore have no option than to pay high rents for the substandard housing and its complimentary services.

## **STUDY AREA**

Festac Town (otherwise known as the Black Arts Festival Town) is situated along Badagry Expressway, Lagos, South West Nigeria. The long-term objective is to provide additional housing stock for the people of Metropolitan Lagos after Black Arts Festival of 1977. The entire Town will occupy, in its ultimate phase, an area of 1,770 hectares and will include seven residential communities of 15-20,000 people each. Thus, the ultimate development will be able to accommodate a total number of 24,000 dwelling units or about 120,000 people. The present development (Phase 1) commenced in 1974 and was completed by the end of 1976. The construction of houses and various services was awarded to about 40 contractors in approximately 70 different sites of the project, while the infrastructure works were assigned to 14 major contractors.

Phase 1 covers a total area of about 460 hectares, comprising of three residential communities 1-111, with a combined planned capacity of about 11,000 dwelling units for 55,000 people. The road layout is made up of local roads (cul-de-sacs and minor roads; connector roads - 5<sup>th</sup> Avenue, 23<sup>rd</sup> Road, 22 Road, 21 Road, and 20 Road, while the arterial roads are the 1<sup>st</sup>, 2<sup>nd</sup>, 4<sup>th</sup> and 7<sup>th</sup> Avenues. [Link to Location Map and Report Images of Festac Town, Lagos](#) provided at back end.

The distribution of dwelling units by income groups is shown in Table 1 below:

Table 1: Distribution of Dwelling Units by Income Group

COMMUNITY	LOW	MEDIUM	HIGH	TOTAL
1	2482	638	1100	4220
11	3008	332	723	4053
111	1835	206	461	2502
TOTAL	7325	1166	2284	10775
%	68%	11%	21%	100%

(Source: FHA Brochure, 1976)

Over 1,000 additional units were also provided in the reclaimed area of Community III (also in Phase 1) and thus, the total number of dwelling units in this phase is 12,000 with an expected population of 60,000. Under the present phase, the total number of dwelling units was divided into 68% for low income, 11% for middle income and 21% for high income. The plot sizes for individual units range from 200 to 1,200 square metres.

Table 2: House Types and Classification

TYPE	CLASS	ACCOMODATION	
10	AH4	2-storey, 4-bedroom detached house – Two sitting/dining, one guest room, study, and a 3 room outhouse	HIGH
9	BH3	2-storey, 3-bedroom detached house, two sitting/dining, and a 2 room outhouse	
8	H4H3	2-storey semi-detached 3-bedroom house, one sitting/dining, and a 2 room outhouse	
7	H3M3	2-storey Terrace 3 bedroom houses, one sitting/ dining.	MED
6	M3	4-storey block of 8 flats, each with 3-bedrooms, one sitting and dining	
5	M3L2A	4-storey block of 16 flats, each with 3 bedrooms, and one sitting/dining.	

4	F1M2B & F1M2A	2-bedroom bungalow with one sitting/ dining + garage	
3	F1L2	2-bedroom bungalow with one sitting/dining.	
2	L2A	4-storey block of 16 flats (2-bedrooms, and a sitting room)	LOW
1	L/A	4-storey block of 32 flats (one bedroom, and a sitting room)	

(Source: Fortune Ebie, 1980)

## RESEARCH METHODOLOGY

The following are the summary of the basic steps followed when conducting the study:

*Research Instruments* – Data was collected through the questionnaire survey and interviews. The self-administered questionnaire model and In-person interview were used.

*Sampling Design, Frame and Sample size* – The questionnaire was sent to 210 sample Festac Town residents. The sample size of 210 was selected randomly from the working population of housing units contained in the Local Government Valuation List of Amuwo Odofin, the Local Government Area Administration. Stratified sampling technique was used. Although, there are ten categories of house types in Festac Town Phase 1, stratification was done in three categories in accordance with the major qualifying income levels at the time of original allocation in 1976: Detached/Duplex houses (above N4500; types 8-10) terrace houses/flats/bungalows, (N2400-N4000; types 3-7) flat lets (under N2400; types 1 & 2) and private; with sample population of 45, 96, 60 and 9 respectively.

*Questionnaire Structure* – The Questionnaire is a schedule. It is a project specific questionnaire designed to elicit physical condition of houses, condition and adequacy of physical estate infrastructure facilities, livability indices such as utility satisfaction level with social infrastructure, and affordability of house rents, water and land use charge rates, and public transportation.

*Responses* - A total of 171 responses were received; made up of 33 for the Detached/Duplex houses, 90 for terrace houses/flats/bungalows, and 39 for flatlets and 9 for private residential. The response rate is 81.4%. Although the response rate is high, we made effort to investigate any selection bias. Sample selection bias is always a potential problem where there are a significant number of non-respondents. Not accounting for it, if it exists, can lead to bias parameter estimates and misleading conclusions (Vossler and Kerkvliet, 1999).

*Interviews and Observation* - Interviews were conducted with representatives of the following organizations: National Power Holdings Plc in order to elicit power demand and supply, conversion of underground cables to overhead cables, and outage rate per day; Lagos State Waste Management Authority for waste collection and disposal strategies; Lagos State Water Corporation, for supply and demand estimates, and water rate; Federal Housing Authority, to investigate revised building regulations 1985, Utility maps, infrastructure distribution layouts, illegal structures, and irregular building approvals; Federal Fire Service, for determining fire-fighting capacity; Amuwo Local Government Authority, for verification of valuation list and land use charge rates; Two Estate Surveying firms based in Festac Town, to obtain evidence of rental and capital values; 10 Shop Owners; Community and Close Chairmen Forum, for security matters and Festac Town Residents Association matters; Nigeria Police Force, for security, police patrol, and traffic offences. The researcher also carried out a structured observation of the Estate.

## **Method of Data Analysis**

Descriptive statistics based on indexed percentage distribution of responses on housing conditions/interior building amenities; condition and adequacy of estate physical infrastructure facilities, livability factors such as utility satisfaction level with social infrastructure, and affordability, constitute the major variables, each having sub-variables. Chi-square Goodness of Fit test of significant difference between theory and expected proportions.



## RESULTS AND ANALYSES

The descriptive statistics of the responses in respect of conditions of houses/ internal building amenities, condition and adequacy of physical estate infrastructure facilities, utility satisfaction level with social infrastructure, and affordability of house rents, water and land use charge rates, and public transportation, are presented in Table 3 – 8 below:

Table 3: Condition of Houses/internal Building Amenities

<b>Section One:</b>						
	<i>N</i>	<i>VB</i>	<i>B</i>	<i>F</i>	<i>G</i>	<i>VG</i>
<i>(i) Physical Condition of houses</i>						
Physical condition of house floor	171	-	-	0.086	0.386	0.343 NS
Structural condition of external walls	171	-	-	0.043	0.386	0.386 NS
Physical condition of windows	171	-	-	0.214	0.329	0.271 NS
Physical condition of doors	168	-	0.014	0.300	0.300	0.186 NS
Physical condition of ceiling	165	-	-	0.186	0.329	0.271 NS
Physical condition of roof	171	-	0.014	0.186	0.400	0.214 NS
Condition of exterior painting	165	-	0.114	0.200	0.300	0.171 NS
<i>(ii) Internal Building Amenities</i>						
Physical condition of water closets	171	0.071	0.029	0.271	0.214	0.229 NS
Physical condition of bathroom	171	-	0.014	0.300	0.300	0.200 NS
Physical condition of water taps	171	0.271	0.229	0.143	0.114	0.029 S
Condition of corridor and external lighting	171	0.014	0.157	0.214	0.243	0.186 NS

Physical condition of kitchen	171	-	0.086	0.243	0.300	0.186 NS
Physical condition of laundry	120	0.086	0.114	0.243	0.071	0.057 S
Condition of interior painting	171	-	-	0.286	0.400	0.129 NS
N-no. of respondents; VB-Very Bad; B-Bad; F-Fair; G-Good; VG-Very Good; S-Difference Significant; NS-Difference not significant						

(Source: Field Survey, 2013)

Section one of the study questionnaire inquired about the physical condition of the buildings, and internal building amenities. An aggregated 81.5% of the respondents rated condition of house floor and external walls as either fair, good or very good; windows, doors and ceiling, roof, and exterior painting were rated 81.4%, 78.6%, 60%, 61.4%, 80%, and 67.1% respectively. This indicates that the conditions of the buildings are generally good. The conditions of the internal amenities were also rated as follows: water closet (71.4%), bathroom (80%), water taps (28.6%), corridor and external lighting (64.3%), kitchen (72.9%), laundry (37.1%), and interior painting (81.5%). The indication is that the physical conditions of water taps and laundry are bad.

Table 4: Condition of Estate Physical Infrastructure Facilities

<b>Section Two:</b>						
	<b>N</b>	<b>VB</b>	<b>B</b>	<b>F</b>	<b>G</b>	<b>VG</b>
Condition of access roads, minor roads, and footpaths	171	0.221	0.386	0.086	0.071	0.021 S
Condition of street lighting	171	0.414	0.257	0.100	0.029	0.014 S
Condition of drainage system	171	0.157	0.214	0.357	0.071	0.014 S
Condition of electricity supply lines, and cable network	171	0.129	0.257	0.414	0.014	- S

Condition of water supply lines and pipework	171	0.514	0.171	0.071	0.014	0.043 S
N-no. of respondents; VB-Very Bad; B-Bad; F-Fair; G-Good; VG-Very Good; S-Difference Significant; NS-Difference not significant						

(Source: Field Survey, 2013)

Section two inquired about the condition of the estate physical infrastructure facilities. As shown in Figure 2 above, an aggregate of 17.8% rated the condition of access roads, minor roads, and foot paths as fair, good, or very good. Street lighting, drainage systems, electricity and water supply lines were rated 14.3%, 44.2%, 42.8%, and 12.8% respectively. The indication is that the estate physical infrastructure facilities are in deplorable condition.

Table 5: Adequacy of Estate Physical Infrastructure Facilities

<b>Section Three:</b>						
	N	NI	NA	FA	A	
Electricity supply	171	0.010	0.686	0.214	-	S
Water supply	171	0.114	0.743	0.057	-	S
Roads and Streets	165	-	0.686	0.457	0.243	S
Street lighting	171	0.557	0.557	0.100	-	NS
Internet/computer services	165	-	0.129	0.500	0.257	S
Drainage facilities	171	-	0.657	0.257	0.100	S
NI-Not Interested; NA-Not Adequate; FA-Fairly Adequate ; A-Adequate; S-Difference Significant; NS-Difference not significant						

(Source: Field Survey, 2013)

Section three asked the respondents to elicit the adequacy of the estate physical infrastructure. 68.6% indicated that mains electricity supply is adequate within the estate, while 21.4% rated it fairly. Respondents rated water supply, street lightening, and drainage facilities as not adequate (74.3%, 55.7%, and 65.7% respectively). The response indicates that apart from internet services that is fairly adequate (50%), water, roads, street lighting and drainages are not adequately provided. The services are therefore inefficient.

Table 6: Level of Satisfaction with Social Infrastructure Facilities

<b>Section Four:</b>								
			VS	S	NSn	D	VD	
Security:	Police Patrol	156	0.143	0.386	0.214	-	0.08	NS
	Neighbourhood Watch	162	0.471	0.114	0.143	0.043	0.18	NS
	Local Vigilante	162	0.457	0.143	0.029	0.157	0.09	NS
Health Care:		159	0.014	0.200	0.314	0.229	0.18	S
		168	0,086	0.314	0.271	0.129	0.08	NS
		162	0.086	0.229	0.286	0.171	0.14	NS
Schools:	Infant Academy	165	0.414	0.029	0.343	0.200	0.18	NS
	Primary Schools	171	0.486	0.08	0.100	0.229	-	NS
	Secondary Schools	171	0.457	0.057	0.300	0.113	-	NS
	Tertiary Institutions & Continuing Education	159	0.463	0.143	0.086	0.071	0.13	NS
	Libraries	171	0.009	0.013	0.100	0.443	0.27	S
	Police Station& Services	168	-	0.300	0.344	0.157	0.39	NS
	Fire Service	171	0.086	0.500	0.229	-	0.08	S
Entertainment:		162	0.043	0.257	0.371	0.100	0.11	S
		159	0.071	0.443	0.214	0.029	0.12	S
		168	0.714	0.086	-	-	0.09	NS
	Post Office Services	171	0.386	0.143	0.286	0.019	0.08	NS
	Markets	171	0.298	0.171	0.100	0.243	0.06	NS
	Places of Worship	171	0.310	0.280	0.057	0.157	0.28	NS
	Banking Services	171	0.560	0.23.2	0.100	0.186	0.08	NS
	Shopping Centres	171	0.144	0.400	0.110	0.246	0.08	NS
	Petrol Filling Stations	171	0.129	0.384	0.200	0.171	0.14	NS
	Open spaces and Playgrounds	171	0.229	0.329	0.186	0.071	0.09	NS
	Repair Workshops	171	0.443	0.200	0.271	0.100	0.08	NS

Waste Collection and disposal	165	0.257	0.387	0.043	0.100	0.07	NS
Sewage Collection and disposal	171	0.343	0.329	0.129	0.014	0.08	NS
VS-Very Satisfied; S-Satisfied; NSnD-Neither Satisfied nor Dissatisfied; Dissatisfied; Very Dissatisfied; S-Difference Significant; NS-Difference not significant							

(Source: Field Survey, 2013)

Section four asked respondents about their level of satisfaction with the social infrastructure provided in the estate. 52.9% were satisfied with police patrol; 58.5% and 60% with neighbourhood watch and Local vigilante respectively. Whereas 40.9% were dissatisfied with hospital services, 40% and 30.5% okayed the health centres and clinic. The respondents were also satisfied with the schools (Infant Academy 44.3%, Primary Schools 56.6%, Secondary Schools 51.4% and Tertiary 60.6%. 71.3% are dissatisfied with library resources, and 54.7% with police services. 58.6% are satisfied with fire services. Respondents are dissatisfied with entertainment facilities in the Estate (21%, 41% and 9% for meeting halls, club houses and cinemas. 52.9% and 46.9% are satisfied with post office and markets respectively. Places of worship, banking services, shopping services, petrol filling stations, open spaces and playgrounds, repair workshops, waste /sewage collection and disposal have 59%, 79.2%, 54.4%, 51.3%, 55.8%, 64.3%, 64.4%, and 68.2% rates of satisfaction respectively. The indication is that the residents are satisfied with the following services: police patrol, neighbourhood watch and vigilante, health centres, clinics, schools, post offices, markets, places of worship, banking services, petrol filling stations, open spaces and playgrounds, repair workshops, waste and sewage collection and disposal. However, there are indications that residents are dissatisfied with hospital and library services, and entertainment facilities.

Table 7: Affordability

Section Five:						
	N	NAp	Naf	SA	Af	
House rental	162	0.171	0.271	0.214	0.214	NS
Water rate bills	171	0.014	0.271	0.114	0.114	S
Electricity bills	171	0.014	0.186	0.414	0.200	NS
Public Transportation costs	171	-	0.171	0.429	0.214	NS
Land Use Charge rate	150	-	0.283	0.419	0.26.3	NS
SA-Somewhat Affordable; A-Affordable; S-Difference Significant; NS-Difference not significant						

(Source: Field Survey, 2013)

We inquired in Section Five about affordability. 42.8% of the respondents affirms affordability of house rental, while 27.15 recorded non affordability; 60.4% for electricity bills, 64.3% for public transportation, 68.2 for Land Use Charge rate. Water rates are not affordable (27.1%). Non responses account for the short fall in the percentage aggregation. It indicates that the estate is affordable in terms of house rental, electricity billing and public transportation costs. However, water rate is exorbitant.

Table 8: Occupancy Rate per room for all House Types

TYPE	CLASS	Occupancy Rates per Room
10	AH4	2 persons per room
9	BH3	2 persons per room
8	H4H3	2 persons per room
7	H3M3	2 persons per room
6	M3	2 persons per room
5	M3L2A	2 persons per room
4	F1M2B & F1M2A	3 persons per room 4 persons per room
3	F1L2	4 persons per room
2	L2A	4 persons per room



1	L/A	5 persons per room
	Mean Occupancy Rate	30/10 3persons per room

(Source: Field Survey, 2013)

From Table 4 above, the average occupancy rate is 3 persons per room; indicating over-population and sustained pressure on available physical and social estate infrastructure facilities and services. The table of Rental and Market Values is presented below.

**Table 9: Rental and Market Values of Festac Properties (December, 2012)**

House Type	Rental Value p.a.	Market Value
1	N200,000-N250,000	N3.0m – N3.5m
2	N300,000-N350,000	N6.0m – N6.5m
3	N550,000-N600,000	N15m – N16m
4	N600,000-N630,000	N16m – N17m.
5	N350,000-N400,000	N8.0m – N9.5m
6	N600,000-N650,000	N11m – N12m
7	N700,000-N800,000	N22m – N23m
8	N1.2m-N1.3m	N26m – N28m
9	N1.5m-N1.6m	N45m – N50m
10	NN1.7m-N1.8m	N55m – N60m

(Source: Field Survey, 2013)

We investigated the current rental and capital values of the various house types and the result is as shown in Table 3 above. This indicates that the rental and capital values are comparatively higher than those of similar neighbouring estates, such as Mile 2 Jakande and Satellite Town. Festac Housing Estate should therefore be less affordable.

## SUMMARY OF FINDINGS AND DISCUSSION

### *Population and occupancy rate:*

According to data obtained from Amuwo Odofin Local Government, the population of Festac Town (Phase 1) is about 900,000 (an increase of 1500% over the planned population of 55,000). This gives a population density of approximately 1950 persons per hectare or 785 persons per acre or 130 persons per standard plot of land, whereas the average number of persons per room (occupancy ratio) is 3.0.

### *Physical conditions of buildings:*

The physical condition of house floors, walls, roofs and ceilings, exterior painting, and the conditions of Internal Building Amenities, such as water closets (WCs), bathrooms, external and corridor lighting, kitchens, and interior paintings are generally good. Water taps and laundries showed significant difference.

### *Condition of estate physical infrastructure facilities:*

The condition of estate physical infrastructure facilities is deplorable. Difference is statistically significant. From observation, many roads are not motorable and many are obstructed by illegally erected makeshift structures. Flooding is recorded in some 4th and 7th Avenue areas after downpour. National Power Holdings Plc reported that over 2.5km of their cable network would need to be replaced within the next 18 months to avoid a major breakdown in power distribution to the Estate.

### *Adequacy of estate physical infrastructure facilities:*

Estate physical infrastructure facilities are generally inadequate. Internet and computer services abound everywhere.

### *Level of Satisfaction with Social Infrastructure Facilities:*

On security, the police reported a decline in crime rate by 25% over the past 12 months, but did not record remarkable drop in traffic and other civil offences. There is one police station located at 2<sup>nd</sup> avenue. It is usually congested with complainants, criminals and seized vehicles, with their activities spilling over to the main 2<sup>nd</sup> Avenue. There is one fire service station located at 3<sup>rd</sup> avenue. An interview revealed that the fire station lacked equipment and personnel.

Most of the shops are individually owned with a few clustering. Interviews with the shop-owners reveal that many of them also reside in their shops. A sizeable number of open spaces and playgrounds have been reallocated for development while many others have been encroached upon by squatters. The buffer zone shielding the Town from Lagos-Badagry Expressway are now cleared and occupied by several places of worship and repair workshops. Interview revealed that many of the development are illegal structures. Lagos State Waste Management Authority (LAWMA) confirmed that the nearest waste disposal site is at Soulos, Ojo. However, a temporary open dump site is in use along 2<sup>nd</sup> Avenue, It is not well maintained. There are incidences of overflowing sewage drains as well as buildings erected directly on utility lines. Residents are satisfied with the social infrastructure facilities, except hospital, library, and entertainment facilities.

*Affordability:*

The rents paid for accommodation in Festac Town is affordable. Table 5 above shows rental and capital values for Festac Town properties as at July, 2013. Prospective tenants are required to make at least one year down payment exclusive of the usual agency and legal fees. Public transportation, electricity bills, and land use charge rates are also affordable, while water rate is exorbitant.

The generally good condition of the houses is attributable to the high quality materials used at the time of construction several years ago. Concrete walls with reinforcements were used; good quality woods as roof trusses, concreted floors, good ceiling materials, and paintings. However, the doors and windows are dilapidating: Good quality bath and water closet materials are in good physical condition. The standards of building construction in the estate were unprecedented in the annals of Nigeria's construction history. According to Fagbohun (2003) infrastructure are the basic requirement of life and its adequacy and worthiness set pace for development and the quality of life. Similar quality of works could also be reported on the infrastructure, but population growth of residents exerted pressure on the existing infrastructure services, stretching them beyond their elastic limits. The ravaging poverty, corruptive tendencies and inflation are likely accountable for the neglect of infrastructure maintenance activities by relevant authorities and residents alike. Spiral inflation and resultant fall

in money value may have impinged slightly on affordability of residents while factors such as government's insensitivity to the plight of the people and lacklustre private sector participation in infrastructure development contributed negatively, and in no small measure, to the livability status of the Estate in terms of condition of sewage systems, street lighting, water supply, library facilities, waste disposal and collection, and recreation.

Research results justify the inadequacy of physical estate infrastructure. Daily power requirement for Festac Town is about 550 megawatts, whereas less than 250 megawatts is supplied daily leading to power outage of 12-18 hours daily. National Power Holdings Plc capacity for electricity generation has been on the decline in recent times hence, there is a short fall in distribution. In contrast with relevant research finding, the researcher's observation revealed that mains water supply to Festac Town is unavailable. According to Close Chairman's Forum, supply to the town was disconnected some 58 months ago following refusal of residents to pay what they considered "LSWC's exorbitant water rates". The residents resorted to alternative sources of water supply, such as digging wells, installing boreholes and water tanker supply. A number of thoroughfare and minor roads have been rendered inaccessible through their closure even in the daytime, thereby impinging on circulation and movement. Street lighting system is available in Festac Town but dysfunctional. The Close Chairman's Forum disclosed that it has remained so for more than 25 years now.

## **CONCLUSION**

All the research questions have been answered. The estate is bedevilled by spiral population explosion and resultant overcrowding, with an occupancy ratio of 3 persons per room (WHO standard – 2 persons per room) and an average population density of 1950 persons per hectare. The residents' population needs to be controlled to reduce overcrowding and spread of communicable diseases.

The buildings are generally in satisfactory physical condition, well ventilated and painted externally. The researcher's site observation confirmed that the buildings are structural sound. Internal building amenities are available, and in satisfactory condition, except their water taps and

laundry. Estate physical infrastructure facilities are in deplorable condition. The residents are satisfied with security, health centres and clinics, schools, police and fire services, post office, markets, places of worship, open spaces and playgrounds, banking services, shopping centres, petrol filling stations, workshops, waste and sewage collection/disposal. However, they are dissatisfied with hospital, library and entertainment facilities. Rents for vacant accommodation, land use charge rates, and public transportation are generally affordable, except water rate. The rental and capital values in the Estate are comparatively higher than those of similar neighbouring estates, such as Mile 2 Jakande and Satellite Town. The work concludes that the Estate is significantly able to meet the needs and aspirations of its residents.

### **Implications of Research Findings**

There are possibilities of further neglect in the future if the present harsh economic climate persists, in which case, the Estate and its residents are at the risk of degeneration; the estate into a slum area, and the residents' health may suffer thereby. There are tell tales observable now, such as condition of sewage system, street lighting, water supply, library facilities, waste disposal and collection, and recreation. Onibokun and Kumuyi (1996) characterised slum housing area as an area without open space and other essential amenities, while Adisa (1994) concluded that such areas are prone to crimes and other social menace. Physical housing conditions are good, but deteriorating social and physical infrastructure facilities may make Festac Town "unlivable" in the 21<sup>st</sup> Century. With the likelihood of continual uncontrolled population increase of residents and squatters that are attracted for commercial purposes, the pressure on existing infrastructure facilities could lead to acute inadequacies and accelerated deterioration of their conditions. Areas of further research for livability should include noise level and safety, household-bus termini distance, transportation choices, and environmental quality.

### **Recommendations**

Festac Town needs to be upgraded with an integrated conservation strategy under a FESTAC TOWN IMPROVEMENT PROJECT (FESTIP). The initiative is to provide infrastructure facelift, population control and community development as linked interventions. The Improvement Project

should be attached to the Office of the Amuwo Local Government Area Chairman, and the operators of the Project are to enlist the support of the Federal Housing Authority and the Festac Police. FESTIP should comprise of representatives of the Local Government, Federal Housing Authority, Festac Town Residents Association, an Estate Surveyor and Valuer and a Town Planner. It should be empowered financially and legally through relevant byelaws to carry out the following tasks:

1. Demolition of all structures, the development of which are inconsistent with the provisions of section 1 of FHA Revised Approval To Building Plans Regulation of 1985 which states in part as follows: “Any unapproved development shall be liable to demolition after a notice has been duly displayed.....” Immediate suspension and subsequent reappraisal of building permits for new development, particularly for shops and places of worship in order to control and reduce resident population and corresponding pressure on available social services.
2. Restoration of damaged street lightening system to enhance security and complement routine police patrol in the Estate.
3. Replacement of broken water pipes and restoration of water supply by mediating in the face-off between the residents and Lagos State Water Corporation.
4. Creating youth employment in order to reduce daytime idle population and touting. For example, the youth may be engaged in minor road repair works.
5. Ensuring that the sewage treatment plant is refurbished to function at full capacity in order to ameliorate the slow dislodgement of sewage and its treatment.

The Local Government and FHA should enlist the cooperation and understanding of all Festac Town residents through the Festac Town Residents Association as invaluable partners in progress. Nothing suggests that such understanding and cooperation will not be forthcoming.

Link to Location Map of Festc Town, Lagos:

<http://maps.google.com/maps?oe=utf-8&rls={moz:distributionID}:{moz:locale}:{moz:official}&q=map+of+festac+town+lagos&um=1&ie=UTF-8&hq=&hnear=0x103b88c58ab93f09:0xba794b2a62413ee2,Festac+Town,+Nigeria&sa=X&ei=vbTCUfDAAqbwiwKQwIGwAQ&ved=0CCsQ8gEwAA>

Report Images of Festac Town

<https://www.google.com/search?q=map+of+festac+town+lagos&rls={moz:distributionID}:{moz:locale}:{moz:official}&tbm=isch&tbo=u&source=univ&sa=X&ei=vbTCUfDAAqbwiwKQwIGwAQ&ved=0CFoQsAQ&biw=1024&bih=518>

## REFERENCES

- Adisa, J. 1994. Urban Violence, IFRA, Ibadan
- Agbola, T 1994. The Politics and Administration of Housing Standards and the Structure of Nigerian Cities. *Urban Management and Urban Violence in Africa*. Vol.1, IFRA, Ibadan
- Barret, J and Beardmore, R.M. 2000. Poverty Reduction in India: Towards building successful slum upgrading strategies. A Paper presented as part of the poverty segment of the World Bank South Asian Urban and City Management, Cuba.
- Clinard, M.B. 1973. Conference Contribution in Weitz Rannnem (1973) Urbanisation and Developing Countries (ed). Report on the Sixth Revovut Conference, Preagar Publisher, New York Urban Poverty
- Ebie, SPOF 1980. The role of the Federal Housing Authority in providing and in the Administration of Social Services in the Festac Town. Paper delivered at the National Conference on Local Government and Social Services held at the Obafemi Awolowo University, Ile-Ife.
- Fadahunsi, S.O 1985. Fifty years of housing in Nigeria Onibokun (ed) Ibadan: Nigerian Institute of Social and Economic Research (NISER)



- Fagbohun, P.O 2008.Housing and Liveability in Nigerian Cities: The study of Housing Situation in Oshodi, Lagos. A Technical Paper presented at the National Conference on Private Sector Driven Housing Delivery: Issues, Constraints, Challenges and Prospects. University of Lagos, Lagos, Nigeria
- Hardoy, J.E. and Satterthwait, 1986. *Shelter, Infrastructure and Services in Third World Cities Habitat*, Volume 10, No.3, .245-284.
- Jakande, L.K. 2003.Housing Development in Nigeria: Which Way Forward? A paper presented at the Two-Day National Seminar of the Nigerian Institute of Building, Ikeja, Lagos
- Misra, B 1986.Popular Settlement in Indian Cities: The Case of Allahabad City International Institute for Development Research, Allahabad, India
- NARC 2012. *Livability literature review: A synthesis of current practice*. US Department of Transportation
- Obudho, R.A and Aduwo 1989.Slum and Squatter Development in Urban Areas of Kenya Workshop Paper presented at Silver Springs Hotel, Nairobi, Kenya
- Obudho, R.A and Owuor, S.O.1994.*Urbanisation and Crime in Kenya Urban Violence*, IFRA, Ibadan
- Onibokun, A.G.1985. Housing Needs and Responses: A Planner's viewpoints *Housing in Nigeria*, Onibokun (ed) 1985, NISER, Ibadan
- Onibokun, A.G and Kumuyi, A.J 1996.*Urban Poverty in Nigeria: Towards sustainable Strategies for its Alleviation*, CASSAD, Ibadan
- Vossler, C.A and Kerkvliet, J 1999. A Criterion Validity Test of the Contingent Valuation Method: Comparing Hypothetical and Actual Voting Behaviors for a Public Referendum
- Weitz, R 1973. Urbanisation and the Developing Countries. Report on Sixth Revovut Conference, Preagar Publishers, London.